

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P#

Luminaire Tested: **HBLED-LD5-24HE-W-CLWG-UNV-L835-ED2-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33385)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-24HE-W-CLWG-UNV-L835-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
WIDE DISTRIBUTION WITH CLEAR LENS, WIREGUARD & DOORFRAME  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21153.0 lumens  
Efficiency: N/A  
Efficacy: 144.6 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.3 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

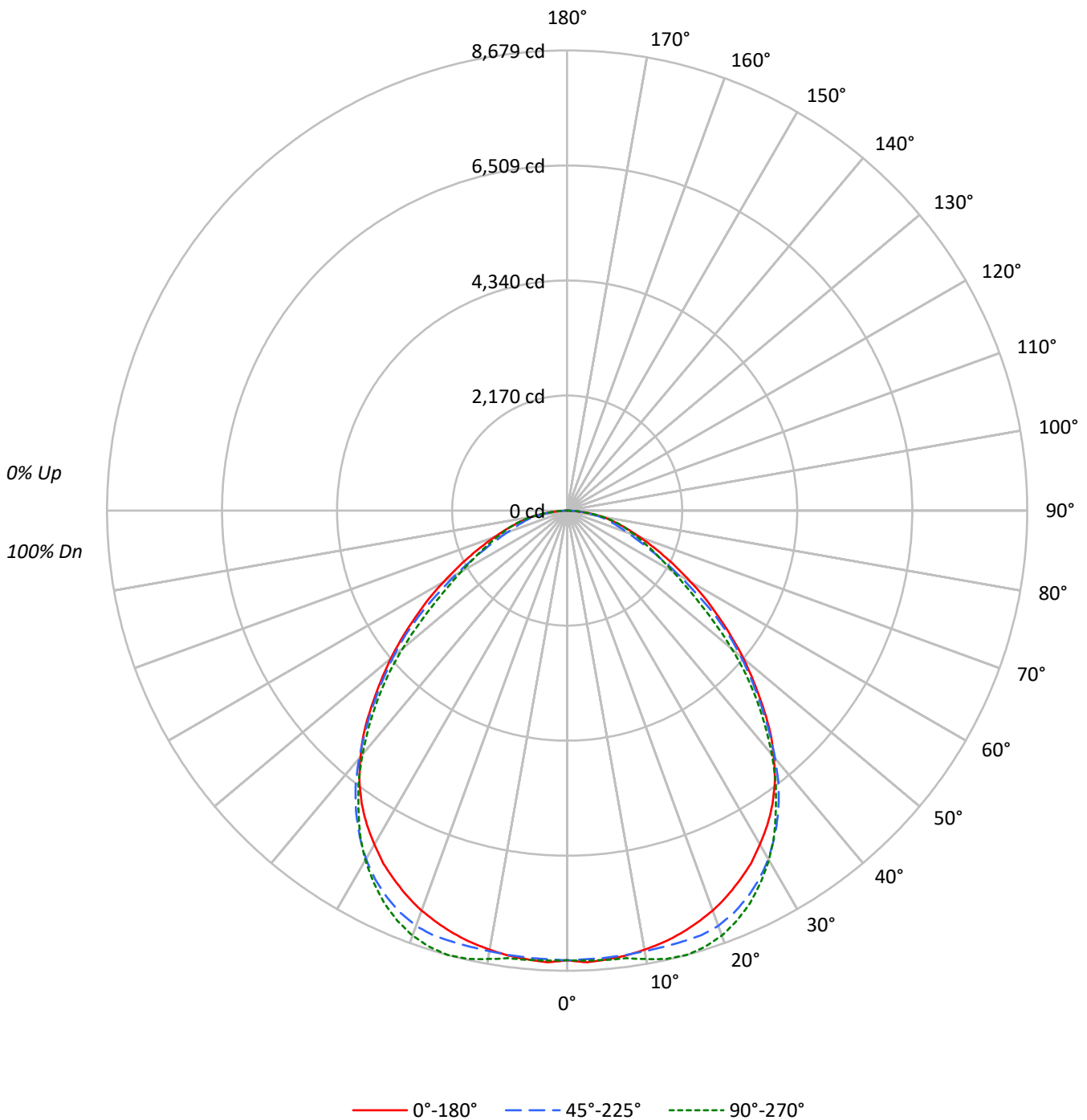
Input Watts (W): 146.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	76	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55
5	79	67	58	52	77	65	57	52	63	56	51	61	55	50	60	54	50	48
6	73	60	52	46	71	59	51	45	58	50	45	56	50	45	54	49	44	42
7	68	55	46	41	66	54	46	40	53	45	40	51	45	40	50	44	40	38
8	63	50	42	36	62	50	42	36	48	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11412	11412	11412
5°	11479	11432	11488
10°	11489	11528	11735
15°	11504	11720	12089
20°	11496	11935	12213
25°	11426	11946	12121
30°	11295	11787	11825
35°	11093	11405	11269
40°	10655	10721	10551
45°	9928	9824	9624
50°	9090	8943	8485
55°	8165	7862	7174
60°	7241	6505	6193
65°	6380	5405	5621
70°	5706	4690	5353
75°	5345	4561	5413
80°	5204	4611	5153
85°	4154	3648	3782



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	808.0	3.8
10°-20°	2379.9	11.3
20°-30°	3661.2	17.3
30°-40°	4272.9	20.2
40°-50°	3970.6	18.8
50°-60°	2943.2	13.9
60°-70°	1799.2	8.5
70°-80°	1024.8	4.8
80°-90°	293.1	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	6849.2	32.4
0°-40°	11122.0	52.6
0°-60°	18035.9	85.3
0°-90°	21153.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21153.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8482	8482	8482	8482	8482	
5°	8499	8460	8464	8458	8506	809
15°	8259	8254	8414	8580	8679	2331
25°	7696	7755	8046	8114	8164	3545
35°	6754	6806	6944	6887	6861	4208
45°	5218	5248	5163	5082	5058	4021
55°	3481	3393	3352	3113	3058	3124
65°	2004	1820	1698	1744	1766	2005
75°	1028	965	877	1000	1041	1100
85°	269	262	236	245	245	310
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8481.7	8481.7	8481.7	8481.7	8481.7
2.5°	8527.7	8479.6	8470.8	8451.1	8494.9
5°	8499.2	8459.9	8464.2	8457.7	8505.8
7.5°	8466.4	8438.0	8455.5	8453.3	8516.7
10°	8409.5	8394.2	8438.0	8486.1	8588.9
12.5°	8346.1	8330.8	8427.1	8549.6	8661.1
15°	8258.6	8254.2	8413.9	8580.2	8678.6
17.5°	8149.2	8155.8	8398.6	8540.8	8628.3
20°	8028.9	8039.8	8335.2	8451.1	8529.9
22.5°	7873.6	7910.8	8212.7	8308.9	8370.2
25°	7696.4	7755.4	8046.4	8114.2	8164.5
27.5°	7506.0	7565.1	7840.7	7875.7	7904.2
30°	7269.8	7352.9	7587.0	7591.3	7611.0
32.5°	7029.1	7103.5	7282.9	7263.2	7267.6
35°	6753.5	6806.0	6943.8	6886.9	6860.7
37.5°	6436.2	6464.7	6552.2	6466.9	6462.5
40°	6066.5	6103.7	6103.7	5985.6	6007.4
42.5°	5672.7	5685.9	5631.2	5519.6	5537.1
45°	5217.7	5248.3	5163.0	5082.0	5058.0
47.5°	4767.0	4797.6	4707.9	4613.9	4572.3
50°	4342.6	4327.3	4272.6	4112.9	4053.8
52.5°	3902.9	3854.7	3832.9	3598.8	3531.0
55°	3480.6	3393.1	3351.6	3113.1	3058.4
57.5°	3089.0	2931.5	2852.8	2666.8	2644.9
60°	2690.9	2513.7	2417.4	2297.1	2301.5
62.5°	2329.9	2144.0	2028.0	1993.0	2008.3
65°	2003.9	1820.2	1697.7	1743.6	1765.5
67.5°	1708.6	1557.6	1419.8	1527.0	1548.9
70°	1450.5	1330.1	1192.3	1349.8	1360.8
72.5°	1236.1	1137.6	1021.7	1170.4	1194.5
75°	1028.2	964.8	877.3	999.8	1041.3
77.5°	846.6	796.3	746.0	820.4	866.3
80°	671.6	621.3	595.1	634.4	665.1
82.5°	474.7	441.9	415.7	444.1	459.4
85°	269.1	262.5	236.3	245.0	245.0
87.5°	61.3	70.0	78.8	72.2	61.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)